Attorney's Docket No.: 12406-140001 / P2001,0678 US N

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Volker Härle et al. Art Unit: 2818

Serial No.: 10/813,530 Examiner: Chuong A. Luu

Filed: March 29, 2004 Conf. No.: 5329

Title : METHOD FOR FABRICATING A SEMICONDUCTOR COMPONENT BASED

ON A NITRIDE COMPOUND SEMICONDUCTOR

MAIL STOP AF

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

REPLY TO ACTION OF AUGUST 8, 2007 AND INTERVIEW SUMMARY OF FEBRUARY 5, 2008

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REMARKS

Applicants' Summary of Telephone Interview

On February 5, 2008, there was a telephone interview between applicants' representative Marc M. Wefers and Examiner Luu regarding the anticipation rejection of claim 1, the only independent claim, in view of U.S. Patent No. 5,838,029 ("Shakuda").

Mr. Wefers explained that, among other limitations, claim 1 requires "dry chemically removing a part of the *metal* layer" (emphasis added). In contrast, the section of Shakuda identified in the final action dated August 8, 2008 (and the prior action dated February 23, 2007) as allegedly disclosing this limitation recites:

"When the *semiconductor* layers are subjected to dry etching by chlorine plasma atmosphere, desired . [sic] regions of the n-type GaN high-temperature buffer layer 55 are exposed as shown in Fig. 7." (Emphasis added, Shakuda at 2:8-10)

In other words, the claim requires dry chemically removing <u>metal</u>, whereas Shakuda only discloses dry etching <u>semiconductor</u>. Plainly, a metal is different from a semiconductor, so applicants' representative argued that there can be no anticipation.

This argument was also set forth in Applicants' response to the prior action dated February 23, 2007, and yet the final action dated August 8, 2008 dismissed the argument, simply stating "Shakuda discloses that the metal layer, which is contained an alloy of Al and In (see column 1, lines 55-59 and column 2, lines 8-9)" (see page 6 of final action). In the interview, applicants' representative explained that the Al and In described in the cited section of column 1, lines 55-59 were simply dopants in the GaN semiconductor. While elemental Al in bulk is indeed a metal, its presence as a dopant in GaN semiconductor does not make the semiconductor a metal. Indeed, Shakuda explicitly states as much by referring to the doped GaN material as a semiconductor. (See, for example, Shakuda at 1:49-51, 2:1, and 2:8). Furthermore, all of the remaining claims distinguish the cited prior art for at least the same reasons because they all depend, either directly or indirectly, from claim 1.

The Examiner agreed with Applicants' representative. Specifically, the Examiner agreed to withdraw the final rejection. The Examiner did not commit to allowing the case, and reserved

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the option of issuing another office action. In this regard, Applicants' representative noted that Applicants have yet to amend their claims since filing the application, and have successfully rebutted prior art rejections in <u>five</u> prior non-final actions and, as best we understand, the present final action, and therefore, respectfully, it is time to allow the case.

Examiner's Summary of Telephone Interview

A copy of the Examiner's Interview Summary was faxed directly to Applicants' representative and is attached hereto. The undersigned notes that the Examiner's Interview Summary is not yet in PAIR. The Examiner's Interview Summary is consistent with the above, and confirms that agreement was reached and that the Examiner will remove the finality of the rejection.

Reply to Final Action

In view of the telephone interview and the confirmation in the Examiner's Interview Summary that agreement was reached and that the finality of the rejection will be removed, we understand the Final Action to be vacated, and so no formal reply to the Final Action is necessary.

If this understanding is incorrect, we respectively submit the remarks in the above Applicants' Summary of Telephone Interview as a formal reply to the final action, and request that the application be allowed. If a formal reply is indeed required, we petition that the period for response to the action dated August 8, 2007, be extended for three months to and including February 8, 2008 pursuant to 37 CFR §1.136. Please apply the extension fees in the amount of \$1050 to Deposit Account No. 06 1050, referencing 12406-140001.

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Please apply any other charges or credits to deposit account 06-1050, referencing 12406-140001.

Respectfully submitted,

Date: 2/07/08 /Marc M. Wefers Reg. No. 56,842/

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TO: MR. MARK WEFERS

FROM: EXAMINER LUU

INTERVIEW SUMMARY

Interview Summary	Application No.	Applicant(s)	
	10/813,530	HARLE ET AL.	
	Examiner	Art Unit	
· ····	Chuong A, Luu	2892	
All participants (applicant, applicant's representative, PTO personnel):			
(1) <u>Chuong A. Luu</u> .	(3)		
(2) <u>Mr. Mark Wefers</u> .	(4)		
Date of Interview: <u>05 February 2008</u> .			
Type: a)⊠ Telephonic b)□ Video Conference c)□ Personal [copy given to: 1)□ applicant 2)⊠ applicant's representative]			
Exhibit shown or demonstration conducted: d) Yes e) No. If Yes, brief description:			
Claim(s) discussed: 1.			
Identification of prior art discussed: <u>Shakuda (U.S. 5,838,029)</u> .			
Agreement with respect to the claims f)⊠ was reached. g) was not reached. h) N/A.			
Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: The participants discussed : Finality of the Rejection (Examiner agrees with applicant's representative position and will remove. The Examiner would like to update search in light of applicant's comments. At first glance, arguments have merit. (A fuller description, if necessary, and a copy of the amendments which the examiner agreed would render the claims allowable, if available, must be attached. Also, where no copy of the amendments that would render the claims allowable is available, a summary thereof must be attached.) THE FORMAL WRITTEN REPLY TO THE LAST OFFICE ACTION MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP Section 713.04). If a reply to the last Office action has already been filed, APPLICANT IS GIVEN A NON-EXTENDABLE PERIOD OF THE LONGER OF ONE MONTH OR THIRTY DAYS FROM THIS INTERVIEW DATE, OR THE MAILING DATE OF THIS INTERVIEW SUMMARY FORM, WHICHEVER IS LATER, TO FILE A STATEMENT OF THE SUBSTANCE OF THE INTERVIEW. See Summary of Record of Interview			
requirements on reverse side or on attached sheet.	·		
	Chal		
Examiner Note: You must sign this form unless it is an Attachment to a signed Office action. U.S. Patent and Trademark Office	Examiner's signature, if requir	ed	
U.S. Patent and Trademark Office PTOL-413 (Rev. 04-03) Interview Summary Paper No. 2008020		0080205	

JUN-03-2007 18:07 From: